

Street Gullies

Whenever there has been a major flooding event in our valley it has become customary to hold drop in sessions in the local towns to get to know what, where and when flooding occurred and would be staffed by representatives from all of the affected agencies.

Two of the most complained about things following flooding incidents are that” the street gullies are never cleaned out until after the event” and if the rivers were dredged then they would cope better with the flows that are required during flooding incidents.

The local Council are responsible for the cleaning and maintenance of the street gullies and I think it is about time that there is some new thought put into the problem that is prevalent for the whole of the Calderdale Borough.

Gullies were a very good invention and were designed to be fitted at the edge of the road to enable water which collected on the road surface could be dispersed of to either an adjacent river or combined sewer.

There have been many different types of gully traps installed over the years from Salt Glazed Clay, Concrete, GRP and more recently Black Plastic. The most used and still in operation are the salt glazed type but are slowly being replaced with the new plastic ones whenever the appropriate type of road works are carried out The salt glazed type are very thick and brittle and having spoken to many of the gully wagon operatives over the years the practice was common to ram the suction pipe into the bottom of the trap and crack it so it would allow water in the trap to soak away leaving no trap at all. There should always be water in the gully trap to ensure odours from the sewer do not come back up the drainage system.

There are many what can be called problem gullies which are either none or slow runners making the dispersal of water during high rainfall times very difficult. This problem is not new as it was a problem when I worked for the Council and I have been retired almost 15 years and the same problem exists with the same gullies.

A few of years ago I understand you the Council were granted a sum of money in excess of £1m to “sort the gully problem out” according to an article in the Halifax Courier. This was announced and at the time I advised that the money be spent wisely but what happened to it. Shortly after this article a program of works started on the main road routes though the valley. The way you appear to have sorted it out was to replace most of the gully grates on the main roads with new ones. What was wrong with the old ones? Nothing as they are made of heavy duty ductile cast iron which has a very long life span, in many cases well in excess of 75 years. The replacement grates were slightly larger in area but less strong as the openings have been increased and the structure is of much lighter construction. The tar macadam was renewed round the new gully top following the replacement to reinstate the road surface however this was not carried out correctly as the level should have been the same as the roads surface. The new repaired surface is higher on many that had this procedure carried out, not much I have to admit but enough to cause water to flow round it and not down into it in order to disperse the water which is the main reason for these gullies.

These works can only at best be described as cosmetic in the fact they have gone no way to solving the problem with many of the street gullies.

The gully tops (grates) are not the problem. The problem lies underground with the connection of the gully to the sewerage system in the road or to the river. Many are either blocked or collapsed which is another cause of them not running in a free flowing manner..

Again in the old days (prior to Calderdale MBC 1974) gullies were emptied on a more regular basis (up to 4 times a year) as the area Councils had in excess of 20 gully wagons at their disposal in total available, now I understand that the Council have only 2 and get others contracted in when needed.. Because this was done regularly the debris that was in the gully and swan neck could be cleaned out as it was still very liquid in constituency but now gullies are left for longer service intervals silts which build up in the trap and the swan neck connection becomes solid. When the gully trap is serviced it is only the trap that is cleared as the swan neck connection remains blocked in many locations.

As I have said there needs to be a new approach to the cleansing of gullies. I know it can be done and it could be considered cost effective in the long term. Following flooding incidents I and most of the residents see gully wagons all over the place emptying them after the event of flooding but when I approach the teams about what there are doing I would ask if they are emptying or are they cleansing and leaving in a free and running manner the general answer is they are emptying only.

This is false economy and needs to be addressed. The minimum that needs to be done to ease the situation is to ensure gullies are made to be clear and free running in order for them to do the job that they are designed to do.

How do you do this?

In the first instance it will be necessary to identify the problem gullies then empty the gully trap followed by a jetting operation to clear the swan neck and connection to the sewer. Ideally a camera survey should also be carried out following this jetting operation to ensure that it is left in a free running manner. This will also identify if there is any damage to the said connection. The connection pipes are again mainly salt glazed clay and prone to cracking as a result of slight movements in the underground road surface structure, plastic pipes which are being increasingly used can deal with this type of movement but are susceptible to squashing reducing the amount of flow the connection can deal with. If the connection is found to be damaged in any way the ideal plan is to fix it by carrying out whatever repairs are considered necessary to ensure the drain is left in a free flowing manner as soon as is practical. By carrying out this work the gully will be left in a condition that will remove water from the road surface as it is intended to do. I know that this will be time consuming initially but in the long term could be very cost effective. The cleansing of the gullies would also have to be done on a more frequent basis to ensure future problems are not created especially in areas of higher risk of flooding.

During the times of serious flooding it should be noted that when the sewer has too much water trying to get into it surcharging occurs, because of the pressure in the sewer water comes back through some of the gully connection pipes. In order to overcome this problem of surcharging it will be more difficult as the main sewer system would have to be replaced with one more appropriately sized to meet the demands that are put onto it. (A very costly exercise)

If the gully connections were sorted out properly I feel it would also help the flood water to be dispersed more quickly following heavy rainfall and flooding events without the need for the Fire and Rescue Service pumping operations and allow lives to return to some form of normality quicker. Some of the minor surface water flooding events would I suspect not happen as regularly as they do again reducing the heartache that is caused when flooding occurs.

I realise that there will be a serious cost element to what I have suggested but as I have also said that in the long term it could be more beneficial to the areas that flood on a regular basis. You have got to start somewhere.

I am not advocating this should be done to all gullies but the ones that are in flood prone areas should be given greater priority. You should be aware there are quite a number of areas of concern.

There seems to be money available for large capital works like what happened in Todmorden, Mytholmroyd and what is due to happen in Hebden Bridge but little appears to be put aside for the regular maintenance after the works are completed. Gullies need regular maintenance to ensure they work as intended and ease the problem of frequent flooding, not once every 5 years as is planned for some. Many by that time will have vegetation growing out of them making them totally useless for the job they were intended for.

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